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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,398	08/03/2006	Samuel Bron	0-06-172 (17660/US/CIP)	8382

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EXAMINER

GODENSCHWAGER, PETER F

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,398	Applicant(s) BRON ET AL.	
	Examiner PETER F. GODENSCHWAGER	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's reply filed June 22, 2009 has been fully considered. Claims 1 and 14 are amended, and claims 1-26 are pending.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al. (US Pat. No. 5,338,478) in view of Kanetani et al. (JP 03-100051A, Derwent English abstract used for citation purposes).

Barry et al. teaches a stabilizer composition for preventing scorching in polyurethane foams containing flame retardants (Column 1, Lines 51 – 61; Column 4, Line 64 – Column 5, Line 3). A mixture of two types of antioxidant agents, a diarylamine and a hindered phenol, is used in the composition (Column 1, Lines 51 – 61). The diarylamine used may also be a mixture of alkylated diphenylamines (Column 2, Lines 10 – 26). The stabilizer composition further comprises a pentaerythritol phosphite such as bis(2,4-di-*t*-butylphenyl)pentaerythritol diphosphite (Column 1, Lines 51 – 61; Column 2, Line 59 – Column 3, Line 9). The stabilizer composition may be added to a polyurethane foam-forming reaction mixture which may further comprise stannous octoate, a metallic salt of carboxylic acid (Column 3, Lines 46 – 63 and Column 4, Lines 39 – 48).

Art Unit: 1796

Barry et al. does not teach the composition further comprises an epoxy compound. However, Kanetani et al. teaches a polyurethane comprising epoxy compounds, specifically bisphenol A diglycidyl ether (Derwent English abstract). Barry et al. and Kanetani et al. are analogous art because they are concerned with the same field of endeavor, namely stabilized polyurethane compositions. At the time of the invention, a person of ordinary skill in the art would have found it obvious to use the bisphenol A diglycidyl ether of Kanetani et al. with the composition of Barry et al. and would have been motivated to do so because Kanetani et al. teaches that the bisphenol A diglycidyl ether provides the polyurethane with improved thermal stability (Derwent English abstract). Furthermore, Barry et al. teach that various additives can be added to the composition (Column 4, Lines 64-66) and Barry et al. is particularly concerned with the prevention of scorching (heat stability) (Column 1, Lines 55-65).

Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al. (US Pat. No. 5,338,478) in view of Kanetani et al. (JP 03-100051A, Derwent English abstract used for citation purposes) as applied to claim 1 above as evidenced by Horacek (US Pat. No. 5,106,883).

Barry et al. in view of Kanetani et al. render obvious the composition of claim 1 as set forth above. Barry et al. further teaches the composition comprising the fire retardant Thermolin 101 from Olin Corp. (Example 2). While Barry et al. do not expressly teach the chemical composition of Thermolin 101, Horacek teaches Thermolin 101 to be ethylene glycol bis(di-2-chloroethyl phosphate) (Column 3, Lines 11 - 12).

Art Unit: 1796

Furthermore, a composition is evaluated by what it is rather than what it does.

Independent Claim 1 is related to a composition whereas Claims 8 - 11 provide limitations regarding a foam, which has not been claimed, into which the composition of Claim 1 can be incorporated. Accordingly, Claims 8 - 11 are not further limiting in as so far as the composition of Claim 1 is concerned.

Claims 14-20, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al. (US Pat. No. 5,338,478) in view of Kanetani et al. (JP 03-100051A, Derwent English abstract used for citation purposes).

Barry et al. teach a method for preventing scorching in polyurethane foams containing flame retardants through the use of a stabilizing composition (Column 1, Lines 51 – 61; Column 4, Line 64 – Column 5, Line 3). The composition may be added to the reaction mixture used to form the foam prior to foaming (Example 2). A mixture of two types of antioxidant agents, a diarylamine and a hindered phenol, is used in the composition (Column 1, Lines 51 – 61). The diarylamine used may also be a mixture of alkylated diphenylamines (Column 2, Lines 10 – 26). The stabilizer composition further comprises a pentaerythritol phosphite such as bis(2,4-di-*t*-butylphenyl)pentaerythritol diphosphite (Column 1, Lines 51 – 61; Column 2, Line 59 – Column 3, Line 9). The stabilizer composition may be added to a foamable reaction mixture which may further comprise stannous octoate, a metallic salt of carboxylic acid (Column 3, Lines 46 – 63 and Column 4, Lines 39 – 48).

Barry et al. do not teach the method further comprising adding an epoxy compound. However, Kanetani et al. teaches a polyurethane comprising epoxy compounds, specifically

Art Unit: 1796

bisphenol A diglycidyl ether (Derwent English abstract). Barry et al. and Kanetani et al. are analogous art because they are concerned with the same field of endeavor, namely stabilized polyurethane compositions. At the time of the invention, a person of ordinary skill in the art would have found it obvious to use the bisphenol A diglycidyl ether of Kanetani et al. with the method of Barry et al. and would have been motivated to do so because Kanetani et al. teaches that the bisphenol A diglycidyl ether provides the polyurethane with improved thermal stability (Derwent English abstract). Furthermore, Barry et al. teach that various additives can be added to the composition (Column 4, Lines 64-66) and Barry et al. is particularly concerned with the prevention of scorching (heat stability) (Column 1, Lines 55-65).

Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al. (US Pat. No. 5,338,478) in view of Kanetani et al. (JP 03-100051A, Derwent English abstract used for citation purposes) as applied to claim 14 above, as evidenced by Horacek (US Pat. No. 5,106,883).

Barry et al. in view of Kanetani et al. render obvious the method of Claim 14 wherein the stabilizing composition is added to a mixture for preparing a polyurethane foam as set forth above. The method further comprises adding the fire retardant Thermolin 101 from Olin Corp. (Example 2). While Barry et al. does not expressly teach the composition of Thermolin 101, Horacek teach Thermolin 101 to be ethylene glycol bis(di-2-chloroethyl phosphate) (Column 3, Lines 11 - 12).

Art Unit: 1796

Response to Arguments

Applicant's arguments, see Pg. 2, ¶1-3 of reply, filed June 22, 2009, with respect to the rejection(s) of claim(s) 1-26 under 35 USC 103(a) in view of Imai et al. (US Pat. No. 4,525,420) have been fully considered and are persuasive. Therefore, the previous rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the newly found prior art reference Kanetani et al. (JP 03-100051A, Derwent English abstract used for citation purposes) that teaches adding epoxy compounds, specifically bisphenol A diglycidyl ether to a polyurethane as set forth in the above rejections.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER F. GODENSCHWAGER whose telephone number is (571)270-3302. The examiner can normally be reached on Monday-Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. F. G./
Examiner, Art Unit 1796
July 14, 2009

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796